

Implementation Guidance for the Technical Peer Review Process

Version 3.0

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**Prepared for the Office of Science and Technology
By the Center for Risk Excellence**



Send process comments to:

Texas Chee,
HQ Program Manager
Office of Science and Technology
Office of Environmental Management
U.S. Department of Energy
Cloverleaf Complex
20400 Century Blvd.
Germantown, MD 20874
Phone: (301) 903-7954
Fax: (301) 903-7618

Alvin Young, Peer Review Coordinator
Director, Center for Risk Excellence
Environmental Programs Group
Chicago Operations Office
U.S. Department of Energy
9800 South Cass Avenue
Argonne, IL 60439
Phone: (630) 252-2503
Fax: (630) 252-2654

Betty R. Love
Administrative Manager of
Peer Review Program
Institute for Regulatory Science
5457 Twin Knolls Road, Suite 408
Columbia, MD, 21045
Phone: (301) 596-1700
Fax: (301) 596 1707

Miles C. Dionisio,
Deputy Peer Review Coordinator
Center for Risk Excellence
Environmental Programs Group
Chicago Operations Office
U.S. Department of Energy
9800 South Cass Avenue
Argonne, IL 60439
Phone: (630) 252-2499
Fax: (630) 252-2654
E-Mail: miles.dionisio@ch.doe.gov

TABLE OF CONTENTS

1.0 Summary	
1.1 Purpose of the Implementation Guidance	1
1.2 Salient Features of the Program.....	1
1.3 Sources of Additional Information.....	1
1.4 List of Abbreviations	2
2.0 The OST Peer Review Policy and its Implementation	
2.1 Introduction	3
2.2 Objective of Peer Review	3
2.3 Multitude of OST Reviews	3
2.4 Implementation	5
2.5 Decision Process.....	5
2.6 Peer Review Coordinator	5
2.7 Structure of OST Peer Review Program	7
2.8 Principles of Review Panel Operation	9
3.0 The Peer Review Process	
3.1 Various Types of ASME Peer Review.....	10
3.2 Application of the Triage Process in Project Selection	11
3.2.1 The Process	11
3.2.2 Projects Exempt From Peer Review	12
3.3 Peer Review Schedules.....	12
3.4 Core Technical Peer Review Criteria	13
3.5 Technology-Specific Peer Review Criteria.....	15
3.6 Preparation for Peer Review	16
3.7 Document Preparation.....	16
3.8 Response to the RP Recommendations	17
4.0 Roles and Responsibilities	
4.1 OST Office Directors.....	19
4.2 Focus Area & Crosscutting Lead Program Managers.....	19
4.3 FA/CC Points of Contact for Peer Review	19
4.4 Principal Investigators	20
4.5 Peer Review Coordinator	20
4.6 Headquarters Peer Review Program Manager	20
4.7 Administrative Manager of the Peer Review Program.....	20
4.8 Technical Secretary of the Review Panels	21
References	22

TABLE OF FIGURES

Figure 1.	OST Review Program.....	4
Figure 2.	OST Technology Decision Process	6
Figure 3.	Schematic of the OST Peer Review Process	8
Figure 4.	Documentation Required for Peer Review by Gate Location.....	18

1.0 Summary

1.1 Purpose of the *Implementation Guidance*

This guidance relates to the peer review process of evaluating technology development activities supported by the Office of Science and Technology (OST). The OST peer review program is managed jointly by the American Society of Mechanical Engineers (ASME) and the Institute for Regulatory Science (RSI). The process is predicated upon the ASME furnishing qualified and independent third party review panels. The RSI is the grantee for this effort and administers the operation of the Review Panels (RPs). This guidance describes the OST peer review policy and its implementation, peer-review process and procedures, key functions and responsibilities, and other relevant topics.

1.2 Salient Features of the Program

- To avoid misunderstanding, OST is restricting the term “technical peer review” only to those technical reviews conducted by independent, external experts.
- The coordination of peer review activities within OST is the task of the Peer Review Coordinator (CPR) at the Chicago Operations Office.
- A nationally recognized technical organization, the ASME, conducts the reviews.
- All Department of Energy (DOE) staff and contractors with real or potential conflicts of interest are excluded from consideration as reviewers.
- The results of the peer reviews as well as the OST responses to recommendations of the review panels, including any appropriate actions committed to by the OST, are published in the annual ASME report entitled, *Assessment of Technologies Supported by the Office of Science and Technology of the Department of Energy*.

1.3 Sources of Additional Information

This document contains guidance for Focus Area and Crosscutting (FA/CC) Program Managers, Product Line Managers (PLMs), Project Managers, Principal Investigators (PIs) and other members of the Project Team who are involved in the peer review process. It specifically excludes policies and procedures related to the activities of ASME/RSI. The *Handbook of Peer Review* published and widely

distributed by the RSI contains the ASME's *Manual for Peer Review* and various procedures implementing ASME policies. The Handbook is also available at RSI's web site, <http://www.NARS.org>. Additionally, any relevant material pertaining to the OST Peer Review Process may be accessed through the Center for Risk Excellence's (CRE), Homepage at <http://riskcenter.doe.gov>.

1.4 List of Abbreviations

AMPRP	Administrative Manager of the Peer Review Program
ASME	American Society of Mechanical Engineers
CPR	Peer Review Coordinator
CRE	Center for Risk Excellence
DAS	Deputy Assistant Secretary
DOE	Department of Energy
EMAB	Environmental Management Advisory Board
EP	Executive Panel
FA/CC	Focus Area and Crosscut
GAO	General Accounting Office
IDMS	Interim Data Management System
NAS	National Academy of Science
NMS	Needs Management System
OST	Office of Science and Technology
PI's	Principal Investigators
PLM	Product Line Managers
POC	FA/CC Point of Contact for Peer Review
PRC	Peer Review Committee
R&D	Research and Development
RP	Review Panel
RSI	Institute for Regulatory Science
SSAB	Site Specific Advisory Board
TMS	Technology Management System
TPRR	Technical Peer Review Report
TS	Technical Secretary of the Review Panels
TTP	Technical Task Plan

2.0 OST Peer Review Policy and Its Implementation

2.1 Introduction

The OST, at headquarters and in the field, has conducted technology reviews of its various activities since the program's inception. These reviews have been traditionally used by OST's FA/CC programs and have helped to ensure that technologies under development are of high quality and have the best possible chance for implementation. In many cases, these reviews were conducted by independent, non-compromised, technical experts and were effective and helpful to the Program Managers. However, these reviews did not engender confidence to the outside world of science, technology, and political oversight that the system was credible or effective.

To address the concerns of external review groups such as the General Accounting Office and the National Research Council, and to meet the increasing technical review needs of the FA/CC programs, the OST initiated an office-wide technical peer review program. Accordingly, peer reviews were made an integral part of program management, supporting the development of OST's program strategy and its investment decisions.

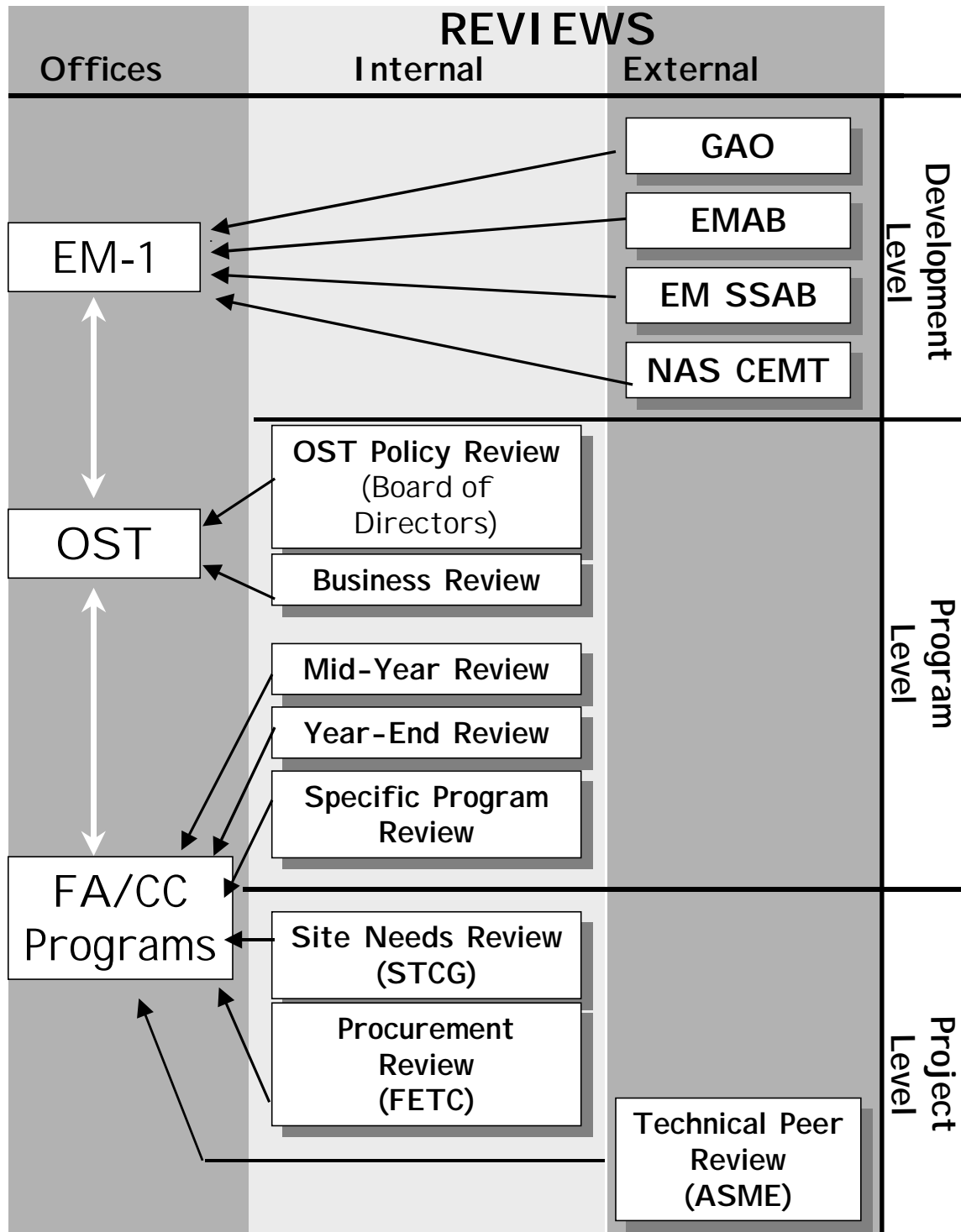
2.2 Objective of Peer Review

The objective of Peer Review is to provide the OST decision makers with uniform, independent, and unimpeachable technical reviews, on a timely basis, to assess the scientific and engineering merit of the OST technology development activities.

2.3 Multitude of OST Reviews

The OST relies upon a number of reviews to initiate, develop and deploy technologies. These include department, program, and project reviews as well as technical assessments. Each review type has a specific purpose, and uses appropriate criteria for evaluating the review subject and selecting reviewers. Figure 1, page 4 illustrates the level and types of reviews conducted for or by OST. To avoid any potential misunderstanding, OST is restricting the term "technical peer review" only to those technical reviews conducted by independent, external experts.

FIGURE 1: OFFICE OF SCIENCE AND TECHNOLOGY REVIEW PROGRAM



2.4 Implementation

The mission of OST is to support the development and deployment of innovative technologies for environmental management with the greatest returned value. Return on investment represents a combination of timeliness, effectiveness, efficiency, and cost of development. Technical peer reviews secure the best possible scientific and technical assistance for the developers and decision-makers involved in this program. Furthermore, technical peer reviews provide an essential management tool in determining the scientific and engineering merits of technologies and systems in which the OST has placed its investment.

2.5 Decision Process

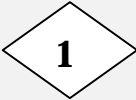





The purpose of a technical peer review is to evaluate a technology or system for its scientific and technical merit, relevance to the cited problems, and probable impact on the scientific field. On the other hand, the purpose of the broader OST Technology Decision Process depicted in Figure 2 on page 6 is to evaluate projects against both technical and non-technical criteria to ensure end products provide superior performance in meeting the requirements of the intended customers.

Technology projects are evaluated at critical decision points (or gates) between each maturation stage of the (Research and Development) R&D process. Before a project can move to a new R&D stage, a go/no-go decision must be made based on criteria defined for each gate. Although technical peer review is a tool to assist in making go/no-go decisions, it is not synonymous with decision-making and should not represent the decision-making process in and of itself.

2.6 Peer Review Coordinator

Recognizing the need for coordination of OST technical peer reviews, the Deputy Assistant Secretary (DAS) of OST has appointed a CPR at the CRE under the Chicago Operations Office. The CPR represents the DAS in dealing with the ASME/RSI and coordinates peer review activities with ASME/RSI.

Figure 2: OST Technology Decision Process

Technology Maturation Stages	Basic Research	Applied Research	Exploratory Development	Advanced Development	Engineering Development	Demonstration	Implementation
	Idea Generation		Proof of Technology		Engineering Prototype	Production Prototype	Utilization by End-user
	No Need	Need	Product Definition <ul style="list-style-type: none"> • non-specific applications • bench-scale 	Working Model <ul style="list-style-type: none"> • reduction to practice • specific applications • bench-scale 	<ul style="list-style-type: none"> • scale-up to test design features and performance limits • pilot-scale • field testing 	<ul style="list-style-type: none"> • end-user validation • full-scale • “beta” site testing 	
Gates							
Expectations			Address priority DOE Need Knowledge of similar efforts	Show clear advantage over available technology	Meet cost/benefit requirement Demonstrate significant end-user demand	Technology ready for end-user	End-user deploys technology
Peer Review			Strongly Recommended	Depending on Need	REQUIRED		

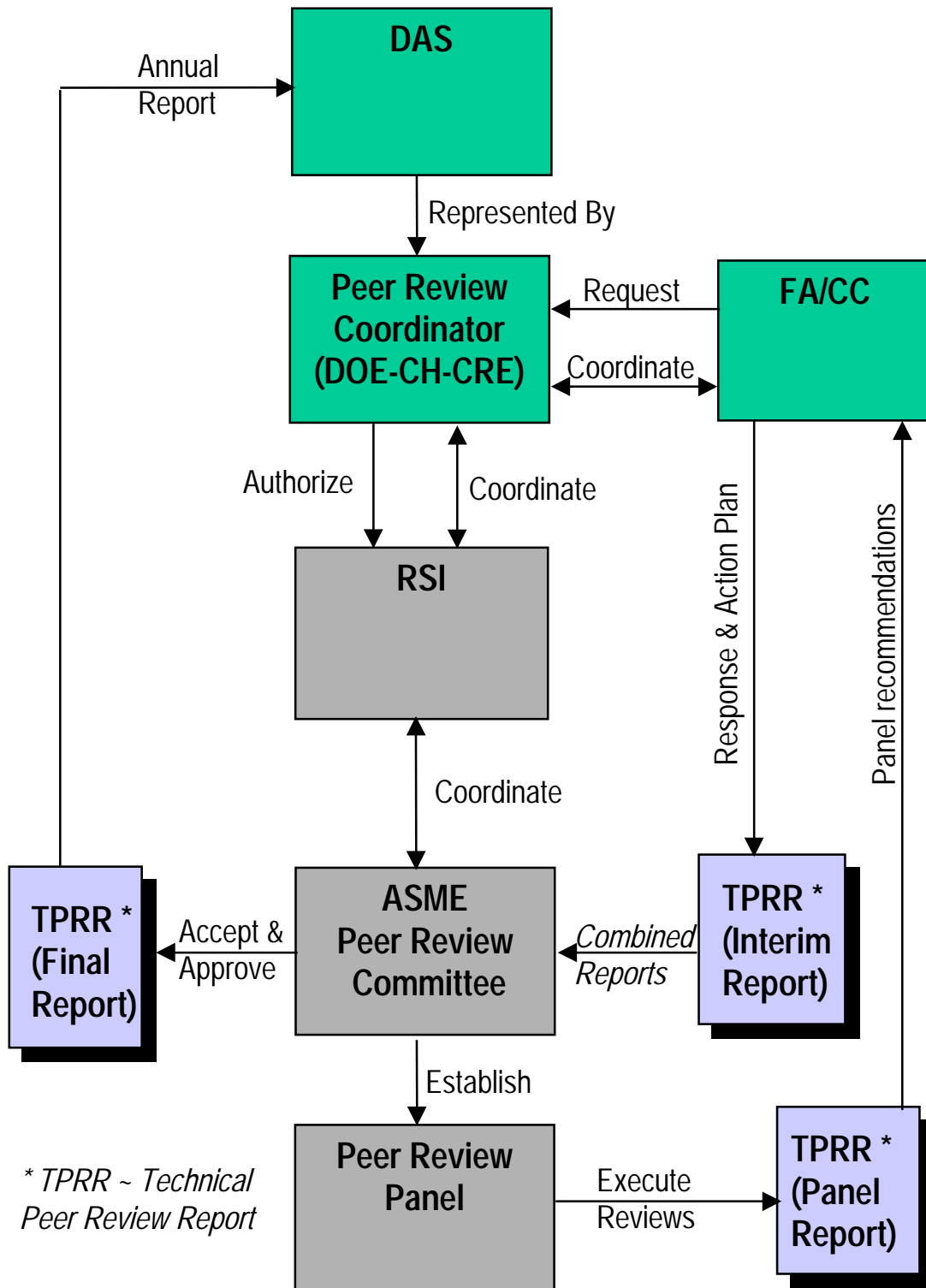
2.7 Structure of OST Peer Review Program

In order to ensure consistency with OST objectives, a grant has been awarded to RSI for a joint ASME/RSI effort to perform technical peer review for OST supported technology developments. The ASME has established a Peer Review Committee (PRC), a standing committee within the Center for Research and Technology Development which meets several times per year to review and approve *Interim Reports*. In November, the PRC presents the *Annual Report of the Peer Review Program* for the previous fiscal year to the DAS. The Executive Panel (EP) of the PRC meets frequently and is responsible for the day-to-day operation of the peer review program. The technical peer review is performed by a Review Panel (RP) which is formed and disbanded once the peer review is complete.

The product of the technical peer review is a *Technical Peer Review Report*, which is prepared in three stages:

- Stage 1: The *Report of the Review Panel* is prepared by the RP in collaboration with the Technical Secretary (TS). This report is provided to the cognizant OST staff including the appropriate FA/CC Program Managers and PIs who prepare a response to the recommendations of the RP;
- Stage 2: The *Interim Report* is a combination of the *Report of the Review Panel* and the DOE's response to the recommendations of the RP;
- Stage 3: The *Final Report* is the product of a reviewed and approved *Interim Report* by the ASME PRC. This process involves the approval of the *Report of the Review Panel* and the acceptance of the DOE response to the recommendations of the Panel. This *Final Report* is included in the *Annual Report* that is presented to the OST DAS at the end of the fiscal year.

FIGURE 3 - SCHEMATIC OF THE OST PEER REVIEW PROCESS



2.8 Principles of Review Panel Operation

Results of the OST peer review process provide input for key decisions in the program implementation and should therefore be consistent with the operating principles and office procedures within OST. Furthermore, peer review is founded on the principle of scientific ethics which governs its application. Therefore, the operation of RPs are guided by the following principles:

- Peer reviewer must observe the rules governing confidentiality and appropriate use of privileged information.
- Peer reviewers do not have authority to make decisions and are not responsible for their outcome. Such responsibility belongs to the Program Managers and OST line management.
- The *Report of the Review Panel* may not contain commitments to fund projects or programs as funding authority rests with federal employees.
- All DOE staff and contractors with real or potential conflicts of interests are explicitly excluded from consideration as reviewers.

3.0 The Peer Review Process

The process and procedures developed for the OST peer review program has evolved, and is now routinely used. Certain schedules have been established for requesting peer reviews and responding to the recommendations resulting from peer review. This section contains a detailed description of various aspects of the peer review process and the project screening approach.

3.1 Various Types of ASME Peer Review

The size and scope of the each review depends on the type of technical review needed by the FA/CC program. In general, there are three types of technical reviews:

- Type I: Multi-Technology Review. The RP established for this type of review consists of five or more individuals who will perform a review of several related technologies or a complex project containing multiple technologies. PIs and other members of the Project Team are required to present the results of their technology development to the RP.
- Type II: Single Technology Review. The RP established for this type of review consists of at least three individuals who will perform a review of a technology. PIs and other members of the Project Team are required to present the results of their technology development to the RP.
- Type III: Document Review. The RP established for this type of review consists of at least three individuals who will perform a document review.
- Type IV: Competing Submissions. This type includes the review of new starts, grant submissions, and others that require an assessment of competing proposals.

Both Types I, Type II, and possibly Type IV would require travel arrangements for the RP. For economic reasons the default location for the meeting of the RP is in Columbia, Maryland. However, another meeting site will be chosen if one or more of the following criteria are met:

- If the FA/CC Program Manager decides that a demonstration of a technology or a site visit would be necessary to peer review a technology;
- If the participation of stakeholders in the peer review meeting is deemed desirable;
- If the overall economy of the peer review meeting would favor another site.

Program Managers are encouraged to group together multiple projects that are technically related to be reviewed in a Type I review. This approach would not only optimize the cost of the review but also would provide a better perspective to the RP of potential complementing and competing technologies. For economic reasons, a Type II Peer Review should be used only when necessary.

During Type III reviews, the RP members do not interact with PIs and other members of the Project Team and thus cannot clarify uncertainties, ambiguities and other problems. Therefore, these reviews must be used for new starts or technologies that have reached a level of maturity such that a reasonably complete and coherent set of documentation is available.

3.2 Application of the Project Screening (Triage) Process in Project Selection

Project screening provides consistent pre-screening of OST technology projects to support FA/CC Program Managers' identification of projects for peer review that maximize benefits from the application of limited peer review resources.

The results obtained from the project screening analysis provides the Program Managers the tool to:

- Screen and identify projects suitable for
 - continuation without peer review,
 - detailed evaluation through peer review, and
 - programmatic decisions;
- Reduce backlog of peer reviews; and
- Verify technology documentation sources.

3.2.1 The Process

At the beginning of the second quarter of the fiscal year, a preliminary technology activity list by FA/CC is made available to the respective Program Managers for their review. This list includes all active, funded activities that are available in the Technology Management System (TMS) and the Interim Data Management System (IDMS) Databases. The FA/CC managers verify all activities that should be considered for the project screening analysis. Projects that are “non-technologies,” already at Gate 6 (Deployment) of its maturation stage, and the ones that have been discontinued but still appear in the TMS database, are flagged before the project screening analysis.

A set of project screening criteria is used to score and rank projects accordingly by FA/CC Programs. These criteria are based on measures of relevancy, availability and funding history. The results of the analysis are presented to the respective FA/CC Program Managers at the end of the third quarter.

3.2.2 Projects Exempt From Peer Review

While there are criteria defined for projects subject to peer review, the following are situations wherein a peer review is deemed inappropriate:

- Technologies already in the Deployment Stage EXCEPT those situations where the potential user of the technology specifically asks for a technical review;
- Technologies already implemented;
- Technical Task Plans (TTPs) for Technical Assistance as in the work performed by the Integrating Contractors for the Large Scale Demonstration Projects for the D&D Focus Area; and
- TTPs for Support Contractors.

3.3 Peer Review Schedules

The process for initiating the project screening analysis starts at the beginning of the second quarter of the fiscal year, and the results are presented to the respective FA/CC Program Managers at the end of the third quarter. The process for initiating peer reviews starts during the last quarter of the fiscal year. During this period, the FA/CC Program Managers identify from the results of the screening analysis, the list of projects that need to be peer reviewed for the subsequent fiscal year.

Requests are submitted to the CPR who in turn coordinates the logistics with the Administrative Manager of the Peer Review Program (AMPRP) at RSI. The AMPRP interacts with the members of the Project Team and schedules the peer review in coordination with the CPR. Normally, the AMPRP attempts to accommodate all requests. If there are more candidate technologies that can be peer reviewed, the CPR is informed who in turn interacts with FA/CC Program Managers for prioritization. Similarly, all other conflicts should be referred to the CPR for resolution.

When feasible, peer reviews should be conducted in conjunction with other scheduled events, as in Mid- Year Reviews, to increase synergy in accomplishing all requirements with the most effective use of resources. Furthermore, the timing of peer reviews should be connected to critical decisions in the planning/budgeting cycle related to technology. As such peer reviews should take place during the second and third quarter of the fiscal year in order to be able to use the results of the peer review as input to making decisions during the beginning of the last quarter of the fiscal year.

All requests for peer review must include the following information:

- The calendar quarter, second or third, when the peer review is to be performed.

However, if a certain date is required it should be so indicated;

- The title of the technology and the TMS technology ID number;
- The name, telephone number and other information of PI, PLM and other key individuals who will be responsible for providing the documentation required for the peer review process;
- The list of technology specific criteria that the FA/CC requests the RP to address; and
- All technical documentation relevant to the technology project.

If necessary, candidate technologies may be also identified during the fiscal year. However, the ASME/RSI team normally requires at least 90 days advance planning. However, under exceptional circumstances, peer reviews may be performed at shorter notices.

In summary, it is during the first quarter of the fiscal year that the FA/CC Project Team should compile and submit all required documentation for the projects scheduled for peer review. The second and third quarter is the period when all the peer reviews should take place. During the fourth quarter, all deliberations and responses to the RPs' recommendations should be worked on and submitted to the CPR.

3.4 Core Technical Peer Review Criteria

The success of the peer review of a technology depends primarily upon the careful identification of the review criteria. In effect the reviewers are being asked to respond to a question expressed in a review criterion. Furthermore, the selection of review criteria relevant to each technology requires the consideration of its uniqueness.

The following general categories for assessing the value of a technology development activity may result in one or more specific review criteria.

1. Technical Validity

The technical validity of a project is the core of peer review. The Project Team must demonstrate that it is aware of the state of the art of science and engineering as related to the project under review, and that the project is technically valid. The technical validity can thus be demonstrated by the following criteria:

- Is the Project Team aware of the relevant published scientific and engineering information as well as practices of the relevant industry?

- Is the design of the project consistent with established scientific and engineering principles and standards?
- Is the execution of the project consistent with established scientific and engineering principles and standards?
- Does the Project Team have adequate technical documentation such as publication of results in peer-reviewed journals?

2. Relevancy

All projects supported by OST must be able to demonstrate that they directly respond to an identified need by the various segments of EM, particularly the Offices of Waste Management and Environmental Restoration. The process should consist of documentation clearly indicating that a need has been identified, and the identified need is being addressed by the project under review. The relevancy can thus be demonstrated by the following review criteria:

- Does the project meet an identified EM need ?
- Is the project superior to existing technologies that address an identified EM need?

3. Overall Assessment

In many cases, the DOE decision-maker needs a more specific answer as expressed, both in the Findings and Recommendations of the Review Panel. In effect, the decision-maker is asking for assistance to make a decision. The appropriate criteria are as follows:

- Based on the technical merit of the project, is the likelihood of its broad deployment reasonably high?
- Based on the DOE-identified needs, is the likelihood of the deployment of the project reasonably high?
- Based on the overall assessment of the project, should it be continued?

Whereas the general criteria apply to essentially all projects, there are projects that require additional review criteria as follows:

4. Economics

Many projects may be technically sound and applicable to DOE needs and yet may be economically unacceptable. Ideally, life cycle costs should be the guiding data and thus the appropriate criterion would be as follows:

- Is the project cost effective as demonstrated by life cycle assessment or other appropriate quantitative methods?

5. Risk and Related Topics

Much of the U.S. regulatory system is driven by human health risk. Furthermore, ecological risk, regulatory issues, and stakeholder participation often drive the applicability of a technology. Thus, the relevant criteria are as follows:

- Have human health risks been adequately addressed?
- Have ecological risks been adequately addressed?
- Have occupational health and safety issues been adequately addressed?
- Has the Project Team collected sufficient data to respond to regulatory and stakeholder concerns?

6. Personnel and Facilities

The qualifications of the PIs and the availability of the necessary facilities are normal review criteria for grants awarded by many federal agencies. However, projects that have already been funded and are in progress are based on an inherent assumption that these requirements were considered during the initial funding. Therefore, the criteria related to personnel qualifications and facilities apply only to new starts as follows:

- Is the Project Team qualified to initiate and conduct the proposed project?
- Does the Project Team have access to facilities that are appropriate to initiate and conduct the project?

3.5 Technology-Specific Peer Review Criteria

The core technical peer review criteria are used to develop technology-specific criteria. This responsibility lies with the FA/CC Program Managers requesting the review. Clearly, not all review criteria apply to all projects. Furthermore, experience shows that any one of the above criteria may result in many project-specific criteria. In particular, the technical validity of a project may result in a rather large number of project-specific criteria.

The process for preparation of technology-specific review criteria is as follows:

- Among the technical core criteria, those dealing with relevancy and technical validity require identification of technology-specific criteria. Therefore, the primary focus of development of technology-specific criteria must be devoted to relevancy and technical validity.
- Criteria on economics and risk apply to most technologies. Accordingly, unless there is a compelling reason, technology-specific criteria must be provided for these criteria
- Criteria on Personnel and Facilities apply only to new starts particularly those covered in Type IV reviews.

Once technology-specific criteria have been identified, they are provided to the TS RPs who ensures their consistency with the core technical peer review criteria as well as the requirements on style and format. Subsequently, they are submitted to ASME/PRC in conjunction with approval of RPs.

3.6 Preparation for Peer Review

For Type I, Type II and Type III reviews, at least 45 days prior to the date of the review, the AMPRP must receive the following information:

- A summary of the technology (Technology Fact Sheet)
- Proposed project specific criteria
- Names, addresses telephone and fax numbers of those members of the project team that are expected to participate in the peer review program

For review Types I, II and III reviews, at least 30 days prior to the date of the review, the AMPRP must receive the required documentation as detailed in Section 3.7 below.

For review Types I and II, the presenter of the project prepares for the material based on the technology-specific criteria.

3.7 Document Preparation

There are two distinct documentation requirements for Type I, Type II and Type III peer reviews. The first type of documentation relates to the gate status of a technology. Figure 4 on page 18, contains the required documentation for the corresponding maturation level of the technology. The other type of documentation deals with specific information that the

RP must also be provided with:

- A documented description of the DOE need that is being addressed
- A description of the current relevant knowledge consisting of published technical information and industrial practices including information on competing technologies
- A detailed description of the study including the experiments and their results. Note that this section constitutes the bulk of the document.
- A list of publications in peer-reviewed technical journals.

Note that internal reports, presentations at scientific meetings, and publication in proceedings of symposia do not qualify as publication in peer-reviewed journals.

3.8 Response to the RP Recommendations

OST policy requires that responses to the recommendations of the RP be submitted and received by the AMPRP through the CPR, within 60 calendar days of the FA/CC Program Manager's receipt of the *Report of the Review Panel* (the first phase of the *Technical Peer Review Report*). Generally, the PI prepares the response to the recommendations of the RP. The DOE response goes through several concurrences - first, to the Field Lead Program Manager who has the responsibility for making sure that all the RP's recommendations are addressed, then to the Headquarters Program Manager in accordance with proper coordination with the EM-53 Office Director. The CPR ensures that the response is in the proper format and complete. The DOE Response Report must come from the HQ FA/CC Program Manager for it to be considered an official response.

The findings of the RP respond to the review criteria and contain the rationale for recommendations of the RP. If the responder for FA/CC agrees with the RP's recommendation, a narrative response and a plan of action is necessary. In case of disagreement the responder must carefully consider the findings of the RP and provide a technical justification for disagreement. The respond would benefit from the inclusion of references to scientific literature.

Figure 4. Documentation Required For Peer Review by Gate Location

DOCUMENTS	GATES					
	1	2	3	4	5	6
Proof of Principle	√	√	√	√	√	√
Literature Review *	√	√	√	√	√	√
Needs Document		√	√	√	√	√
Test Plan at the appropriate scale		√	√	√	√	√
Data Quality Assurance Plan			√	√	√	√
Proof of Design				√	√	√
Construction Plan					√	√
Implementation Plan						√

* Review of existing relevant information derived from technical literature. Refer to Procedure 11 of “Procedures for ASME/OST PR” (Item 2: Technical Status)

4.0 Roles and Responsibilities

4.1 OST Office Directors and HQ Program Managers

The OST Office Directors and the HQ FA/CC Program Managers are responsible for the overall program management for activities under their purview. Included in this will be the review and approval of peer review of technologies from identification to the response phases of reviews. Coordination and communication will be consistent with established operating protocol within their offices with the HQ and Field staff for FA/CC programs for peer review activities. Finally, it is the HQ Program Managers' responsibility to transmit the official DOE response to the RP's recommendations to the CPR within the allotted time of 60 days after receipt of the *Report of the Review Panel*. Should additional time be needed in preparing the response, the CPR should be notified immediately.

4.2 FA/CC Field Lead Program Managers

The FA/CC Field Lead Program Managers initiate the review process by making written requests for technical peer reviews to the CPR in collaboration with their HQ counterparts. Other responsibilities include developing a prioritized list of technologies to be reviewed, coordinating responses to the recommendations of the RP, and covering the cost of FA/CC program personnel and material needed to prepare for the requested peer reviews. In addition, it is the responsibility of the Field Lead Manager to make sure that the DOE response and the action plan is in the correct format and addresses all the RP's recommendations. He/she is the federal representative that ensures the action plan is carried out at the Field.

4.3 FA/CC Points of Contact for Peer Review (POC)

Usually, the CPR interacts with a POC, generally a federal employee, who is specifically designated by the Field Lead Program Managers for each of the FA/CC program. The Project Team consists of this POC and the PI for the technology. This person arranges for the PI to provide relevant technical documentation early, at least 30 days prior to the scheduled review date. They must also respond to requests for supplemental materials to expedite the review. In the event that sufficient technical documentation cannot be provided by the Project Team, the CPR will deem it necessary for the review to be cancelled.

During the actual review, this POC or a federal representative from the appropriate FA/CC program is required to be present in order to ensure that the PI understands the importance of the peer review.

Once the *Report of the Review Panel* is received by the FA/CC Project Team, the POC must ensure that any potential misunderstanding, obvious errors and similar issues are identified and provided to the AMPRP **within 5 working days** of its receipt.

HQ Program Managers, in concert with their respective Field Lead Program Manager, must also ensure that response to the recommendations of the RP is correctly prepared and provided to the AMPRP (through the CPR), within 60 days after receipt of the *Report of the Review Panel*.

4.4 Principal Investigators (PIs)

PIs provide technical documentation to the AMPRP, which should conform to the requirements in section 3.7 of this guidance document. This documentation must reach the Office of the AMPRP at least 30 days prior to the review date. For Types I and II, the PI of the project to be reviewed, in most cases, should present and respond to the RP.

4.5 Peer Review Coordinator (CPR)

The CPR represents the DAS and is the principal federal official responsible for the formulation of the *Implementation Guidance* that describes the mechanics of the OST Peer Review Program. The CPR is the key official for initiating the preparation of candidate technologies to be reviewed, and is the link between the OST staff and the ASME/RSI staff. In addition, the CPR oversees the budget to support the program, maintains the peer review records for OST, and keeps track of OSTs activity metrics.

4.6 Headquarters Peer Review Program Manager

The HQ Peer Review Program Manager within the OST is responsible for monitoring overall peer review activities and providing policy, program planning, and budget direction for OST peer review activities, in close collaboration with the CPR at the Chicago Operations Office.

4.7 Administrative Manager of the Peer Review Program (AMPRP)

The AMPRP is the principal link between the peer review operation at ASME/RSI on one side and the CPR, other OST officials and OST contractors on the other side. The activities of the AMPRP include the following:

- Receiving the requests for peer review from the CPR at the beginning of and during the fiscal year;
- Providing monthly status reports to those involved in peer review for each fiscal year;
- Interacting with the CPR to resolve issues of concern;
- Providing to the PIs and others the appropriate information for preparation for peer review of their project;
- Management of RP meetings;
- Copy editing and distributing the *Report of the Review Panel* to CPR, FA/CC Program Managers, PIs and others who request them; and
- All other administrative activities related to the operation of the peer review program.

4.8 Technical Secretary of the Review Panels (TS)

The TS is responsible for the technical aspects of the review program. The responsibilities of the TS include the following:

- Assisting the RPs in preparing the *Report of the Review Panel*;
- Evaluating the technical information provided by the project team in terms of their suitability for distribution to the RP;
- Preparing or assisting in the preparation of the summary of technologies to be reviewed;
- Assisting in the preparation of technology-specific review criteria;
- Resolving problems identified by the project team within five days after the issuance of the *Report of the Review Panel*;
- Responding to technical issues from members of the RPs, and the Project Team;
- Preparing the *Interim Report* which entails combining the *Report of the Review Panel* and the DOE response.

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1. American Society of Mechanical Engineers, Center for Research and Technology Development, August, 1998. "Manual for Peer Review"
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3. U.S. Department of Energy, Office of Technology Development (EM-54), August 27, 1993. "Planning and Conducting Technical Peer Reviews" (Standard Operating Procedures - Procedure No. EM-50-3.2.2)
4. Committee on the Department of Energy - Office of Science and Technology's Peer Review Program, Board on Radioactive Waste management, Commission on Geosciences, Environment, and Resources, National Research Council, 1997, "Peer Review in the Department of Energy - Office of Science and Technology: *Interim Report*"
5. Attachment from DOE Memorandum, G. Boyd to A. Taboas, October 29, 1997, "Program Directions for the Office of Science and Technology (OST) Peer Review Process"
6. Committee on the Department of Energy - Office of Science and Technology's Peer Review Program, Board on Radioactive Waste Management, Commission on Geosciences, Environment, and Resources, National Research Council, 1998, "Peer Review in Environmental Technology Development Programs – The Department of Energy's Office of Science and Technology"